

Listing of Claims:

1-9 (Cancelled)

10. (new) A device for accelerating the speed of a projectile consisting of:

a projectile; and

a carrier for carrying the projectile; and

an acceleration means to move the projectile and its carrier effectively together; and

an effectively anchored apparatus to encounter and effectively stop or substantially reduce the speed of the moving projectile carrier with said apparatus having an opening or otherwise unblocked path to allow the largely unrestrained projectile to continue in its path past said apparatus; and

a leveraging means, as part of or operatively connected to the anchored apparatus, positioned to receive the energy of the carrier and transmit it through a lever or set of levers to the rear of the projectile; whereby

the already moving projectile is further accelerated.

11 (new) A device for accelerating the speed of a projectile consisting of:

a projectile; and

a carrier for carrying the projectile; and

an acceleration means to move the projectile and its carrier effectively together; and

an effectively anchored apparatus to encounter and effectively stop or substantially reduce the speed of the moving projectile carrier with said apparatus having an opening or otherwise unblocked path to allow the largely unrestrained projectile to continue in its path past said apparatus; and

a leveraging means placed in or being part of the projectile's movable carrier for receiving, as the carrier impacts the anchored apparatus, the energy of that impact and transmitting that energy in leveraged form through the leveraging means to the rear of the projectile; whereby

the already moving projectile is further accelerated.

12. (new) The device of claim 11 wherein:

The leveraging means is hydraulic having a movable diaphragm or piston which impacts the anchored apparatus thus transmitting the energy as compression within a nearby chamber whose outlet impacts the rear of the projectile.

13. (new) the device of claim 12 wherein:

the fluid, gel, gas, or other medium inside the compression chamber is an explosive whose ignition is the result of the impact, or any other form of ignition, or any combination thereof, whereby

additional propulsion is achieved.

14. (new) The device of claim 11 further comprising:

a sealed area in advance of the projectile's path for containing a vacuum; and

vacuum creation means, powered by the same sudden or explosive acceleration that initially propels the projectile and carrier, with a resulting pressure occurring in a first chamber equipped with a first sealed plunger or diaphragm which moves in response to the expansion and which is operatively connected to a second sealed plunger or diaphragm in a second chamber such that, as the second plunger or diaphragm moves through the second chamber, a vacuum is drawn in the second chamber; and

a sealed cover for the aforementioned sealed second chamber which is either penetrable, breakable or removable for the advancing projectile such that the vacuum created in the area in advance of the projectile is allowed to accumulate until it is time for the projectile to exit; whereby

air resistance is reduced in advance of the projectile facilitating less restrained acceleration.

15. (new) A method for accelerating a projectile comprising the steps of:

- (a) accelerating a projectile and carrier together,
- (b) slowing or stopping the carrier by an encounter with a restrictive contact element located essentially in the path of the oncoming carrier,
- (c) conducting the carrier's kinetic energy from the restrictive contact element through a leveraging device,
- (d) pushing the back or trailing end of the projectile from the faster moving portion of the leveraging device, and
- (e) adding more velocity to the already moving projectile.